

WHAT IS CLAIMED IS:

*SuS A7*  
1. In an online system, a method for providing digital photographic images to target devices, the method comprising:

5 receiving a request to provide a target device with a copy of a particular photographic image;

determining capabilities of the target device;

based on the capabilities of the target device, determining a format that is desired for providing the target device with a copy of the particular photographic image;

10 determining whether a cached copy of the particular photographic image already exists in said determined format;

if a cached copy exists, providing the target device with the cached copy of the particular photographic image and thereafter terminating the method;

if a cached copy does not exist, translating the particular photographic image into a copy having said determined format; and

providing the target device with the copy having said determined format.

2. The method of claim 1, further comprising:

storing the copy having said determined format in a cache memory.

20 3. The method of claim 2, further comprising:

receiving from the target device a subsequent request for the particular photographic image; and

providing the target device with the copy stored in said cache memory.

25 4. The method of claim 1, wherein said request specifies a photographic identifier (photo ID).

SEARCHED  
INDEXED  
MAILED  
FILED  
20

*Gov A7*

24

5. The method of claim 4, wherein said photo ID comprises a unique ID  
created by said online system for identifying photographic images.

6. The method of claim 4, wherein said photo ID comprises a 128-bit value.

5  
7. The method of claim 4, wherein said photo ID is created from an  
auto-incrementing counter.

10  
8. The method of claim 4, wherein said photo ID is created from a system  
timestamp.

20  
9. The method of claim 1, wherein said request specifies a user identifier  
(user ID).

10. The method of claim 9, wherein said user ID comprises a unique ID  
created by said online system for identifying users.

11. The method of claim 1, wherein the capabilities of the target device  
include screen resolution.

25  
12. The method of claim 1, wherein the capabilities of the target device  
include screen size.

13. The method of claim 1, wherein the capabilities of the target device  
include color support.

14. The method of claim 1, wherein the capabilities of the target device  
include currently-available communication medium that the target device employs to transmit  
its request.

Sub A' 7

25

15. The method of claim 14, wherein currently-available communication medium comprises wireless communication.

5           16. The method of claim 14, wherein currently-available communication medium comprises wireline communication.

10           17. The method of claim 1, wherein said step of determining capabilities of the target device includes:

querying the device for its capabilities.

15           18. The method of claim 1, wherein said step of determining capabilities of the target device includes:

determining capabilities from a knowledgebase, based on a device class for the target device.

20           19. The method of claim 1, wherein said step of determining a format that is desired includes:

determining an appropriate resolution for rendering the particular photographic image at the target device.

25           20. The method of claim 1, wherein said step of determining a format that is desired includes:

determining an appropriate color space for rendering the particular photographic image at the target device.

21. The method of claim 1, wherein said step of determining a format that is desired includes:

determining an appropriate image size for rendering the particular photographic image at the target device.

Sub A' T

22. The method of claim 1, wherein said step of determining a format that is desired includes:

determining communication bandwidth available for transmitting a copy of the photographic image to the target device.

5

~~23. The method of claim 22, wherein the communication bandwidth available is determined, at least in part, based on a device class for the target device.~~

10

24. The method of claim 1, wherein said target device includes a handheld computing device having display capability.

卷之三

25. The method of claim 1, wherein said target device includes a cellular phone device having display capability.

26. The method of claim 1, wherein said target device includes a pager device having display capability.

27. The method of claim 1, wherein said target device includes a personal computer having display capability.

20

28. The method of claim 1, wherein said target device includes WAP (Wireless Application Protocol) support.

25

29. The method of claim 1, wherein said step of determining a format that is desired includes determining user preferences, if any, for rendering images at the target device.

30. The method of claim 1, wherein said request specifies a photographic identifier (photo ID), and wherein said step of determining whether a cached copy of the

*Sub A 7*

particular photographic image already exists is determined, at least in part, based on the photo ID for the particular photographic image.

31. The method of claim 1, further comprising:  
5 based on the capabilities of the target device, determining metadata for the particular photographic image that may be provided to the target device.

32. The method of claim 31, wherein said metadata includes attribute  
information for the particular photographic image.

10 33. The method of claim 32, wherein said metadata includes annotations for  
the particular photographic image.

34. The method of claim 33, wherein said annotations include text data.

15 35. The method of claim 33, wherein said annotations include voice data.

36. An online photographic server system for providing digital photographic  
images to target devices, the system comprising:

20 a storage module for storing digital photographic images for sharing among  
users; and

a photographic server:

for processing a request to provide a target device with a copy of a  
particular photographic image;

25 for automatically determining capabilities of the target device; and

for providing the target device with a copy of the particular  
photographic image, said copy being automatically translated into a particular format based  
on the capabilities of the target device.

*Sub A7*

28

37. The system of claim 36, further comprising:  
a cache memory for storing copies of photographic images that have been  
translated.

5                 38. The system of claim 37, wherein said photographic server first attempts to  
satisfy the request by retrieving a copy of the particular photographic image having the  
particular format from the cache memory.

10                 39. The system of claim 36, wherein each digital photographic image stored  
by said storage module is associated with a photographic identifier (photo ID).

15                 40. The system of claim 39, wherein said request includes the photo ID for  
said particular photographic image.

20                 41. The system of claim 40, wherein said photo ID is created from an  
auto-incrementing counter.

25                 42. The system of claim 36, wherein said request specifies a user identifier  
(user ID), and wherein said system stores information associating each user with one or more  
particular digital photographic images.

30                 43. The system of claim 36, wherein the capabilities of the target device  
include screen resolution.

35                 44. The system of claim 36, wherein the capabilities of the target device  
include screen size.

40                 45. The system of claim 36, wherein the capabilities of the target device  
include color support.

*Sub A7*

29

46. The system of claim 36, wherein the capabilities of the target device include currently-available communication medium that the target device employs to transmit its request.

5 47. The system of claim 36, wherein currently-available communication medium comprises wireless communication.

10 48. The system of claim 36, wherein currently-available communication medium comprises wireline communication.

49. The system of claim 36, wherein said photographic server includes the ability to query the target device for its capabilities.

50. The system of claim 36, wherein said photographic server includes a knowledgebase for determining the capabilities of the target device.

51. The system of claim 36, wherein said particular format is selected based on an appropriate resolution for rendering the particular photographic image at the target device.

20 52. The system of claim 36, wherein said particular format is selected based on an appropriate color space for rendering the particular photographic image at the target device.

25 53. The system of claim 36, wherein said particular format is selected based on an appropriate image size for rendering the particular photographic image at the target device.

Sub A 7

54. The system of claim 36, wherein said particular format is selected based on communication bandwidth available for transmitting a copy of the particular photographic image to the target device.

5 55. The system of claim 54, wherein the communication bandwidth available is determined, at least in part, based on a device class for the target device.

10 56. The system of claim 36, wherein said target device includes a handheld computing device having display capability.

20 57. The system of claim 36, wherein said target device includes a cellular phone device having display capability.

25 58. The system of claim 36, wherein said target device includes a pager device having display capability.

59. The system of claim 36, wherein said target device includes a personal computer having display capability.

60. The system of claim 36, wherein said target device includes WAP (Wireless Application Protocol) support.

25 61. The system of claim 36, wherein said particular format is selected, at least in part, based on user preferences, if any, for rendering images at the target device.

62. The system of claim 36, wherein the storage system stores metadata for each of the digital photographic images, and wherein the photographic server is capable of determining metadata for the particular photographic image that may be provided to the target device.

*Sub A<sup>7</sup>*

63. The system of claim 62, wherein said metadata includes attribute information for the particular photographic image.

5                   64. The system of claim 62, wherein said metadata includes annotations for

the particular photographic image.

10                  65. The system of claim 64, wherein said annotations include text data.

10                  66. The system of claim 64, wherein said annotations include voice data.

*Add A<sup>2</sup>*